UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,547	03/31/2004	Richard Warren Hailey	014586-9013-00	7402

1131 7590 12/29/2008

MICHAEL BEST & FRIEDRICH LLP
Two Prudential Plaza
180 North Stetson Avenue, Suite 2000
CHICAGO, IL 60601

EXAMINER	
FABER, DAVID	

ART UNIT	PAPER NUMBER
2178	

MAIL DATE	DELIVERY MODE
12/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/814,547	HAILEY ET AL.	
	Examiner	Art Unit	
	DAVID FABER	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed on 16 October 2008.

2. Claims 1, 14-16, and 28 have been amended.

3. The rejection of Claims 1 and 14 under 35 USC 112, second paragraph, has been withdrawn as necessitated by the amendment. The rejection of Claims 1, 12-13, 16-17, and 28-30 under 35 U.S.C. 102(b) as being anticipated by Poole et al (US Patent #6,006,242, patented 12/21/1999) has been withdrawn as necessitated by the amendment. The rejection of Claims 2-6, 7-11, and 14-15 under 35 U.S.C. 103(a) as being unpatentable over Poole et al in further view of Harold et al (Harold et al, "XML in a Nutshell, Second Edition") Claims 1, 12-13, 16-17, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of O'Rourke et al (US Patent #7,117,436, filed on 8/31/1999)

4. Claims 1-30 are pending. Claims 1, 14-16, and 28 are independent claims.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 16 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 16 and 28 recites the limitation "each embedded rule" in line 7, and line 7, respectively. Examiner is unsure if this element dynamic document structure is a new

element or depending of the element “one or more embedded rules” introduced in line 6 of Claim 1, and line 6 of Claim 28, respectively. Thus, there is insufficient antecedent basis for this limitation in the claim.

8. Claim 16 and 28 recites the limitation "the rule" in line 12, and line 12, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1, 12-13, 16-17, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of O’Rourke et al (US Patent #7,117,436, filed on 8/31/1999)

As per independent claim 1, Poole et al discloses a method:

- creating a current transaction data set; (Column 5, lines 3-7; Column 29, STEP 1: collecting transaction data by instantiating (or create) business objects. Thus, the document developer specifics content to be put into the final document.)
- establishing at least one computer-processable dynamic document structure (Poole et al discloses a dynamic document structure in FIG 1; Col. 1 lines 15-

20, whereby dynamically constructing an electronic document for subsequent publication in pre-printed or electronic form.)

- establishing a set of computer-processable rules (Column 5, lines 3-24; Column 5, line 63-Column 6, line 14; Column 7, lines 28-60: The document developer specifics content to be put into the final document in order to meet the objectives of the parties in a transaction and to meet certain business, legal, and/or government rules and regulations.)

- configuring each rule in the set of computer-processable rules is configured to be embedded in one or more computer-processable documents dynamic document structures and to determine the content to be included in at least one instance of a document generated from one of the one or more computer-processable dynamic document structures wherein each rule is executed based on the current transaction data set; (Column 29 discloses step by step process in constructing a document wherein step 1 involves collecting transaction data, wherein this same data is used throughout the construction process, such as in Step 6 in generating the document by resolving document entities. Poole discloses this step with use of the same transaction data in shown in an embodiment disclosing the generating of a document in Column 5, lines 3-62; Column 6, lines 49-64; Column 7, lines 28-60 that after the transaction data is collected (document developer specifics content to be put into the final document), each of the constituent portions of

the document (content) (based on the data collected) is associated with an entity reference wherein the references are check to make sure they follow all business, legal, and government requirements (rules) which produces content fragments having integrity by virtue of being complaint with one or more business, legal, or government requirements. In other words, content included in the document follow all the required rules implemented that define the content that is to be placed into the document. Furthermore, as stated in Col 7, lines 28-60, the content of the regulation is incorporated into a final document by referencing its corresponding document content. Since each of the content of the regulation is incorporated by referencing the document component into the final document, the regulations/rules is embedded into the dynamic document structure.)

- creating a computer-implemented database; storing each rule in the set of computer-processable rules in the database; storing content in the database; (Column 4, lines 54-56; Column 6, lines 15-48)
- associating the stored content with one or more rules from the set of computer- processable rules in the database; (Column 5, lines 3-62; Column 7, lines 28-60)
- configuring each dynamic document structure to have a tree- architecture, (Poole et al discloses in Column 4, lines 6-16, Claim 17; a SGML parser parsing a document creates a tree wherein implicitly a tree is created that

contains at least one root node. After parsing and during validating, process implicitly starts at top of the tree at the root and work its way down the tree), to resolve to one or more instances of a document, (Poole discloses the document construction resolves an instance of a document in FIG 2, Col. 5 lines 54-60 wherein instance contains unresolved entity references. When an entity reference within a reference is resolved, a new document instance is produced, thus resolving a document instance.)

- resolving, with a computer processor and in accordance with the transaction data set, at least one dynamic document structure based on the current transaction data to create a specific instance of a document in a static form. (Column 5, lines 3-62; Column 6, lines 49-64; Column 7, lines 28-60. In addition, Column 18, line 56 – Column 19, line 11)

However, Poole fails to specifically discloses rules in accordance with a rules markup language, document content embedded with one or more rules from the set of computer-processable rules and resolving, at least one dynamic document structure by executing the one or more rules from the set of computer-processable rules embedded in the document content based on the current transaction data set to create a specific instance of a document in a static form. However, O'Rourke et al discloses of a web page in as a script in a tag-delimited page description language (markup language) containing embedded markers (rules) written in HTML that indicate the relative locations for dynamic content insertion when the markers are indicated. (FIG 3, FIG 4; Col 6, lines

59-65; Col 7, lines 7-55) This process is referenced through a parse tree architecture. (Abstract, lines 1-13, Col 8, lines 9-61) Thus, when the dynamic web page is generated to be displayed in a web browser, the document is scanned and executes the markers to be replaced with its corresponding current content to be displayed in which the marker was associated to. The end result is producing a static web page viewed in the browser at that time.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention modified Poole's document generation with rules with O'Rourke document generation with embedded markers since it would have provided the benefit of allowing page artists to design and visualize Web pages using conventional HTML code editing tools that would take advantage of the structure inherent in HTML document to describe the various playable regions in a simple and unobtrusive manner.

As per dependent claim 12, Poole et al discloses a method:

- creating a static document structure that can be resolved into one or more instances of a document that includes at least some content that is determined before and some content that is unchanged during and after a resolution process. (Column 18, line 56 – Column 19, line 11: Discloses creation about static documents, and how static documents are different than dynamic indicating static documents remain unchanged for many transactions)

As per dependent claim 13, Poole et al discloses a method:

- providing a data set (Column 4, lines 54-56) configured to be processable by one or more rules built on the architecture for a set of rules (Column 6, line 34: rules that dictate the access and utilization of components; Claim 16)

As per independent claim 16, Claim 16 recites similar limitations as in Claim 1, and is similarly rejected under rationale. Furthermore, Poole et al discloses a method:

- retrieving one or more cross-referenced document components from a data base, the one or more document components configured to include document content and one or more embedded rules, the one or more rules defining content to be included in documents when each rule is executed based on the current transaction data set; (Column 29 discloses step by step process in constructing a document wherein step 1 involves collecting transaction data, wherein this same data is used throughout the construction process, such as in Step 6 in generating the document by resolving document entities. Poole discloses this step with use of the same transaction data in shown in an embodiment disclosing the generating of a document in Column 5, lines 3-62; Column 6, lines 49-64; Column 7, lines 28-60 that after the transaction data is collected (document developer specifics content to be put into the final document), each of the constituent portions of the document (content) (based on the data collected) is associated with an entity reference wherein the

references are check to make sure they follow all business, legal, and government requirements (rules) which produces content fragments having integrity by virtue of being complaint with one or more business, legal, or government requirements. In other words, content included in the document follow all the required rules implemented that define the content that is to be placed into the document. Furthermore, as stated in Col 7, lines 28-60, the content of the regulation is incorporated into a final document by referencing its corresponding document content. Since each of the content of the regulation is incorporated by referencing the document component into the final document, the regulations/rules is embedded into the document components.)

- processing the one or more cross-referenced document components in a processor to generate a tree having a root node; processing the tree beginning at the root node; (Column 4, lines 6-16: parsing a document creates a tree wherein inherently a tree is created that contains at least one root node. After parsing and during validating, process inherently starts at top of the tree at the root and work its way down the tree.)

However, Poole et al fails to specifically disclose the one or more embedded rules defining content to be included in documents when each rule is executed based on the current transaction data set and when one of the one more embedded rules is

encountered, evaluating the rule based on the current transactions data set and replacing it with a value. However, O'Rourke et al discloses of a web page in as a script in a tag-delimited page description language (markup language) containing embedded markers (rules) written in HTML that indicate the relative locations for dynamic content insertion when the markers are indicated. (FIG 3, FIG 4; Col 6, lines 59-65; Col 7, lines 7-55) This process is referenced through a parse tree architecture. (Abstract, lines 1-13, Col 8, lines 9-61) Thus, when the dynamic web page is generated to be displayed in a web browser, the document is scanned for markers and executes the markers to be replaced with its corresponding current content (some presenting a value) to be displayed in which the marker was associated to. The end result is producing a static web page viewed in the browser at that time.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention modified Poole's document generation with rules with O'Rourke document generation with embedded markers since it would have provided the benefit of allowing page artists to design and visualize Web pages using conventional HTML code editing tools that would take advantage of the structure inherent in HTML document to describe the various playable regions in a simple and unobtrusive manner.

As per dependent Claim 17, Poole et al discloses a method:

- establishing an architecture for a set of rules (Column 5, lines 1-10; FIG 1)

As per independent claim 28, Claim 28 recites similar limitations as in Claim 16 and is similarly rejected under similar rationale.

As per dependent claim 29, Claim 29 recites similar limitations as in Claim 17 and is similarly rejected under similar rationale.

As per dependent Claim 30, Claim 30 recites similar limitations as in Claim 28 and is rejected under similar rationale. Furthermore, Poole et al discloses establishing a list of data structures. (Column 4, lines 53-56: a collection of documents is a list of data structures)

11. Claims 2-6, 7-11, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of O'Rourke et al (US Patent #7,117,436, filed on 8/31/1999) in further view of Harold et al (Harold et al, "XML in a Nutshell, Second Edition", printed June 2002, pp 171, 378, 383, 398, 431, 438-439, 444-445, 448, and 451-452).

As per dependent claims 2-6, Poole et al and O'Rourke et al fails to specifically disclose creating a schema having a condition element, a choose element, an iterators element, and a functions element. However, Harold et al discloses a condition element (xs:Boolean, Page 398; xsl:if, Page 439), choice element (xs:choice, Page 378), iterators element (xsl:for-each, iterates over the nodes that are identified, Page 438), and a functions element (xs:import, its function is to import, Page 383).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method and O'Rourke et al with Harold et al's disclosure since it would have provided the user the benefit of supplying

the user with information on assigning types to elements and attributes and allowing the user to define custom types.

As per dependent claim 7-11, Poole et al and O'Rourke et al fails to specifically disclose creating a schema having an external interface element that is configured to be resolved into a value, wherein the value is chosen from a group that includes a set, an XML DOM node, and an XML DOM node list, and wherein the external data interface element is configured to have an entity reference attribute and a return type attribute, and having an internal interface and an external interface element.. However, Harold et al discloses an param element (xsl: param, (receives a value) Page 444; xsl:with-param, (sends a value) p451) that sends/receives a named parameter (value) that contain attributes of a name and a select expression. (Page 445, 452) The name represents the parameter's name or entity reference and the select expression that represented to return a value of a particular type. (Page 431) In addition, the retrieved value can be a node-set (p431, 171), a collection of Xpath nodes. (p171) In addition, the xsl:template provides information how data is used including the received value using xsl:param. (p444-445, 448)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method and O'Rourke et al with Harold et al's disclosure since it would have provided the user the benefit of supplying the user with information on assigning types to elements and attributes and allowing the user the ability to retrieve the information from an outside source.

As per independent Claim 14, Claim 14 recites similar limitations as in Claim 1 and is similarly rejected under rationale.

Poole et al and O'Rourke et al fails to specifically disclose creating a schema having a condition element, a choose element, an iterators element, and a functions element, and having an external interface element that is configured to be resolved into a value. However, Harold et al discloses a condition element (xs:Boolean, Page 398; xsl:if, Page 439), choice element (xs:choice, Page 378), iterators element (xsl:for-each, iterates over the nodes that are identified, Page 438), and a functions element (xs:import, its function is to import, Page 383). In addition, Harold et al discloses an param element (xsl: param, Page 444; xsl:with-param, p451) that receives a named parameter (value) that contain attributes of a name and a select expression. (Page 445, 452) The name represents the parameter's name or entity reference and the select expression that represented to return a value of a particular type. (Page 431) In addition, the retrieved value can be a node-set (p431, 171), a collection of Xpath nodes. (p171)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method and O'Rourke et al with Harold et al's disclosure since it would have provided the user the benefit of supplying the user with information on assigning types to elements and attributes, allowing the user to define custom types and retrieve the information from an outside source.

As per independent Claim 15, Claim 15 recites similar limitations in as in Claim 1, 12 and Claim 14 combined, and is similarly rejected under rationale.

As per dependent claims 18-22, Claims 18-22 recite similar limitations as in Claims 2-6, and are similarly rejected under rationale.

As per dependent claims 23-27, Claims 23-27 recite similar limitations as in Claims 7-11, and are similarly rejected under rationale.

Response to Arguments

12. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/David Faber/
Examiner, Art Unit 2178

	/CESAR B PAULA/ Primary Examiner, Art Unit 2178